UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,245	03/01/2002	Donald R. Brewer	AFOSS.0107	4261

7590 08/19/2003

Jeffrey G. Degenfelder
Carstens, Yee & Cahoon, L.L.P.
P.O. Box 802334
Dallas, TX 75240

EXAMINER	
MISKA, VIT W	

ART UNIT	PAPER NUMBER
2841	

DATE MAILED: 08/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/087,245	BREWER ET AL.	
	Examiner	Art Unit	
	Vit W. Miska	2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-173* is/are pending in the application.

4a) Of the above claim(s) *62-173* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-61* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-173* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-167, drawn to a watch face with a liquid crystal display layer, classified in class 368, subclass 84.

II. Claims 168-173 drawn to a watch with component mounting details, classified in class 368, subclass 88.

Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as in timepieces having configurations of the watch case other than that of claims 168-173. Further, Invention II may be used to house a different display than that claimed in claims 1-167. See MPEP § 806.05(d).

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

2. This application contains claims directed to the following patentably distinct species of the claimed invention: the two species of Figs 1-5B and 7A-7B, respectively.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over

the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

3. During a telephone conversation with J. Degenfelder on 8/1/2003 an oral election was made with traverse to prosecute the invention of Group I and species of Figs. 1-5B, claims 1-61. Affirmation of this election must be made by applicant in replying to this Office action. Claims 62-173 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 22 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Each of these claims is dependent on itself.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1, 3,4, 6-9, 11-13, 15, 16, 19, 21 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Basturk ('399). With respect to claim 1, the

reference discloses in Fig. 2 a watch face with selective backgrounds including polarizer layer PAb1,a twisted nematic type liquid crystal display CL beneath the polarizer layer for rotating or not rotating the polarized light (col. 7, lines 20-21), reflective polarizer layer PR1 beneath the liquid crystal for reflecting rotated light and producing a first background and transmitted non-rotated light (see col. 7, lines17ff), reflective layer PR2 located beneath reflective polarizer PR1 for reflecting the transmitted light to produce a second background of the watch face (col. 11, line 40).

7. With respect to claims 7-9 and 11-13, patentee indicates that dial 10 (clock face) may have hour symbols (col. 2, line 41) and be colored (col. 11, line 51). A color changing layer is further shown at PAb2 as in claim 15. Switching means as in claims 21 and 22 are suggested at col. 1, lines 40-41.

8. Claim 23 is rejected under 35 U.S.C. 102(e) as being anticipated by Basturk ('942). The reference discloses a watch face similar to that of Basturk ('399) with polarizer 46, liquid crystal 28, reflective polarizer 60 and reflective layer 18. A manual switching means is suggested at col. 8, lines 22ff for controlling voltages applied to the liquid crystal.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 2, 5, 10, 14, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Basturk ('399). With respect to claim 2, the polarizer layer AB1 is not specified as being of any particular color, except in the examples given, and thus one of ordinary skill in the art would select the polarizer of any color to produce the desired color effects for the watch face. The birefringent LC in claim 5 is noted as being a conventional type of liquid crystal display and one skilled in the art would consider the same for use in Basturk. A mirrored surface for the reflective layer would be obvious to one skilled in the art in view of the suggestion that the reflector may be formed by a metallic dial and the need to achieve maximum reflection. Regarding claim 18, Fig. 1 illustrates watch hands and a movement being provided in combination with the LC display. A hole for the shaft driving the hands would thus be an essential part of such structure. The shape of the module and watch face as in claim 20 would be an obvious decorative feature and could be selected from any number of suitable shapes specific to timepieces.

10. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Basturk ('399) as applied to claim 15 above, and further in view of Arikawa ('934). The latter reference teaches the use of a retardation layer 34 in Fig. 25 for a color changing layer in a liquid crystal display. It would be obvious to one skilled in the art that layer PAb2 in Basturk may be a retardation layer for providing the desired color effects for the display, as taught by Arikawa.

11. Claims 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Basturk ('942) as applied to claim 23 above, and further in view of Brewer et al ('185). The Brewer et al patent teaches producing various color patterns on a watch face by varying the voltages applied to the liquid crystal. One skilled in the art having both references would thus have a suggestion of providing this effect in the liquid crystal display of Basturk as an obvious decorative feature.

12. Claims 29-45, 47-54 and 56-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Basturk ('399) in view of Brewer et al ('185). The corresponding elements of Basturk have been identified above. The Brewer reference further teaches dividing the liquid crystal of the watch face into a plurality of separately controlled segments A-H. One skilled in the art having both references would have a suggestion of dividing the display face of Basturk in this manner as a means for separately controlling portions of the display, as in claim 29. The features recited in the remaining claims are

either present in the Basturk patent or obvious in view thereof, for the same reasons as corresponding claims 1-28.

13. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Basturk and Brewer et al ('185) as applied to claim 44 above, and further in view of Arikawa ('934). It would be obvious for one skilled in the art to provide a retardation layer as layer PAb2 in Basturk for the same reasons as in claim 17.

14. Claim 55 is rejected under 35 U.S.C. 103(a) as being unpatentable over Basturk ('942) in view of Brewer et al ('185). The reference discloses the liquid crystal display watch face as noted previously with a suggestion of manual switching control for the color display face. In view of Brewer et al one skilled in the art would be taught to divide the display into a plurality of segments for separate control of the display elements thereof.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vit W. Miska whose telephone number is 703-308-3096. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on 703-308-3121. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4900.

Vit Miska
Primary Examiner

VM
August 10, 2003